

Using Soliton Waves to Enhance Combustion in Support of Terminal Speed Burst in Cruise Missiles

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Simon Edwards

Research Acceleration Initiative

Introduction

As described in 1 March 2024 and other publications, soliton waves may be used to influence chemical combustion in many contexts. Depending upon the relative direction of the soliton waves, combustion may either be accelerated or halted. Directing soliton waves toward an incoming cruise missile might cause a flame-out and therefore could be used to disable incoming missiles.

Abstract

For the desired speed-burst application, soliton waves might be generated from within a missile in order to exceed typical limitations on the rate of fuel use in a missile whereas slow-burning solid fuels are used.

By directing soliton waves from the rear of a missile in the general direction of the front of the missile, free protons would be energetically forced toward the fuel source, artificially increasing the level of volatility of the fuel and, therefore, the maximum rate at which the fuel may be consumed.

Conclusion

This approach allows for a “best of both” solution which enables cruise missiles to be fuel efficient for the majority of their journey, but also enables them to dramatically accelerate during the terminal phase of flight when attempts at interception are most likely.